



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,458	03/06/2007	Gerardus W.J. Kaandorp	06-433	2118
20306 7590 03/27/2009 MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606				
EXAMINER				
STORK, KYLE R				
ART UNIT		PAPER NUMBER		
2178				
MAIL DATE		DELIVERY MODE		
03/27/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,458

Applicant(s)

KAANDORP, GERARDUS W.J.

Examiner

KYLE R. STORK

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-29 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/CIS)
Paper No(s)/Mail Date 3.1.07; 3.1.07
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This non-final office action is in response to the application filed 7 September 2006.
2. Claims 1-29 are pending. Claims 1, 15, and 16, are independent claims.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 31 March 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. The examiner accepts the drawings filed 7 September 2006.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 16-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per independent claim 16, the applicant claims a "script generation system (line 1)" comprising "a synthesiser (line 3)" and "a determinator (line 7)." However, the synthesiser component and the determinator component are software. As such, the applicant's claimed system is a software system. Such a software system falls outside the protection offered under 35 USC 101, as it is neither a process, machine, manufacture, nor composition of matter. Therefore, claim 16 falls outside the protection offered under 35 USC 101, based upon the claim being directed toward non-statutory subject matter.

As per dependent claims 17-29, the applicant fails to cure the deficiencies of independent claim 16. Therefore, claims 17-29 are similarly rejected.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-9, 12-13, and 15-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Claussen et al. (GB 2359157, published 15 August 2001, hereafter Claussen).

As per independent claim 1, Claussen discloses a method of rendering document data compliant with an XML-based mark-up language, comprising the steps of:

fetching the document data (page 1, line 33- page 2, line 9)

parsing the document data into a document object model (DOM) representation so as to provide a tree structure, comprising nodes representative of the document data elements including tags and/or attributes (Figures 5-6)

reconstructing the document object model (DOM) representation into a reconstructed DOM representation by replacing the nodes of prespecified elements of said document data elements by one or more nodes comprising standard XML-compliant elements having standard tags and attributes so as to functionally extend said XML-compliant mark-up language (Figure 5-6)

rendering the document data with the reconstructed DOM representation (Figures 5-6; page 3, line 40- page 4, line 10)

As per dependent claim 2, Claussen discloses the method wherein the pre-specified elements are elements with standard tags and/or attributes providing a functionality, the pre-specified elements being replaced by standard XML compliant elements having one or more different tags and/or attributes providing functionality (Figures 5-6; page 3, line 40- page 4, line 10: Here, a custom tag is replaced by a standard XML compliant script code).

As per dependent claim 3, Claussen discloses wherein the pre-specified elements are elements with custom tags and/or custom attributes, the pre-specified elements being replace by standard XML compliant elements having standard tags and/or attributes (Figures 5-6).

As per dependent claim 4, Claussen discloses the method comprising the steps of:

reconstructing the DOM representation by replacing a subset of pres-specified elements of the document data elements by one or more nodes having standard XML compliant elements with standard tags and attributes (Figures 7-8 and 11)

rendering the document data with the reconstructed DOM (page 3, line 40- page 4, line 10)

only upon triggering reconstructing the DOM representation by replacing the remaining pre-specified elements of the document data elements by one or more nodes comprising standard XML compliant elements with standard tags and attribute (page 1, line 33- page 2, line 9; page 3, line 40- page 4, line 10)

As per dependent claim 5, Claussen discloses wherein triggering is caused during run-time by user action or an external event (Figure 6: Here, the event is triggered based upon receiving a custom element in the data stream).

As per dependent claim 6, Claussen discloses wherein:

the parsing step comprises parsing the document data into a DOM representation so as to provide a tree structure, comprising one or more nodes representative of standard XML compliant elements with standard tags and/or attributes and one or more nodes representative of custom elements with one or more custom tags and/or one or more attributes (Figure 5)

the reconstructing step comprising reconstructing the DOM representation by replacing the nodes of custom elements by one or more nodes comprising standard elements (Figure 6)

As per dependent claim 7, Claussen discloses wherein the step of reconstructing the DOM representation comprises accessing and modifying the DOM representation data by executing program code (page 3, line 40- page 4, line 10).

As per dependent claim 8, Claussen discloses wherein a scripting language interpreter is applied to execute the script code (Figure 8).

As per dependent claim 9, Claussen discloses wherein the steps of reconstructing the DOM representation comprises the steps of:

traversing the DOM representation node for node recursively (page 3, line 40- page 4, line 10)

upon determining that a node is to be replaced:

creating a new node of standard elements (Figures 4 and 11; page 7, line 25- page 9, line 34)

optionally creating a subtree of one or more additional nodes by adding these additional nodes to the newly created node (Figures 4 and 11; page 7, line 25- page 9, line 34)

inserting the new node and the additional nodes, if any, into the parents children list of the DOM representation on a position immediately before or after the node representative of the node that is to be replaced (Figures 4 and 11; page 7, line 25- page 9, line 34)

removing the node that is to be replaced from the DOM representation (Figures 4 and 11; page 7, line 25- page 9, line 34)

moving one or more children of the removed node that was to be replaced to the new node or to a present additional node, if any, that is part of the subtree the new node is a root of (Figures 4 and 11; page 7, line 25- page 9, line 34)

As per dependent claim 12, Claussen discloses the method comprising after the step of parsing the document data into a DOM representation the additional step of saving the current DOM representation in a DOM shadow representation (page 3, lines 13-21; page 6, lines 16-25: Here, the DOM, defined at page-translation time is a DOM shadow representation).

As per dependent claim 13, Claussen discloses saving DOM element attributes first child, last child, next sibling, previous sibling, and parent node (page 24, line 25- page 25, line 19).

As per dependent claim 15, Claussen discloses wherein the step of fetching the document data comprises fetching the data from a remote server (page 1, line 32- page 2, line 9).

As per dependent claim 16, Claussen discloses wherein the step of rendering the document data with the reconstructed DOM representation is performed by a standard web browser including any web browser applications based on the technology of these standard browsers (page 1, line 33- page 2, line 9).

As per dependent claim 17, Claussen discloses the method comprising:

reconstructing the DOM representation by replacing at least one node of a pre-specified element of the document data elements by one or more nodes with intermediate custom elements (page 3, line 40- page 4, line 10)

rendering the document data with the reconstructed DOM using the at least one intermediate custom element (page 3, line 13-21: Here, script code is compiled into Java code)

upon triggering the step of reconstructing the DOM representation by replacing of the at least one node of the at least one intermediate custom element by one or more nodes comprising standard elements having standard tags and attributes (page 3, line 40- page 4, line 10; Figure 6)

As per dependent claim 18, Claussen discloses wherein the XML compliant document data is an XHTMLT or HTML document or a document with syntax compliant with any language derived from XHTML or HTML (Figure 5).

As per dependent claim 19, Claussen discloses the method comprising the step of dynamically adding one or more new elements to an existing element (page 3, line 40- page 4, line 10).

As per dependent claim 20, Claussen discloses the method comprising the step of dynamically replacing one or more existing elements by one or more new elements (page 3, line 40- page 4, line 10).

As per claims 20-24, the applicant discloses the limitations substantially similar to those in claims 1-4, respectively. Claims 20-24 are similarly rejected.

As per claims 25-29, for each claim, the applicant discloses the limitations substantially similar to those in claim 1. Claims 25-29 are similarly rejected.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claussen, and further in view of Spicer et al. (US 2003/0018815, published 23 January 2003, hereafter Spicer).

As per dependent claim 10, Claussen discloses the limitations similar to those in claim 9, and the same rejection is incorporated herein. Claussen fails to specifically disclose mutually connecting the new node and the node that was to be replaced. However, Spicer discloses mutually connecting the new node and the node that was to be replaced (claim 22). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Spicer with Claussen, since it would have allowed a user to track changes made within the document.

As per dependent claim 11, Claussen and Spicer disclose the limitations similar to those in claim 10, and the same rejection is incorporated herein. Spicer further discloses wherein the step of connecting comprises providing both the node of the node

that was to be replaced and the new node with an attribute containing a reference to one another (claim 22: Here, the nodes are associated). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Spicer with Claussen, since it would have allowed a user to track changes made within a structured document.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Claussen.

As per dependent claim 14, Claussen discloses the method comprising traversing the DOM representation node for node and saving the DOM representation into the DOM shadow representation, by:

starting with some root node (page 24, line 25- page 25, line 39)

initializing at least the attributes representative of the first child node, the last child node, the next sibling node, the previous sibling node, and the parent node with predefined start values (page 24, line 25- page 25, line 39)

detecting if the node has a child node (page 24, line 25- page 25, line 39)

Claussen fails to specifically disclose:

if the node has a child node, then add that child node to the node in the DOM shadow representation by updating the values of attributes firstChild and lastChild of the node and updating the values of attributes previousSibling, nextSibling, and parentNode of the child node and, where necessary, its new siblings

repeating the steps for every further child node.

However, the examiner takes official notice that at the time of the applicant's invention, hierarchical documents inherently maintained attributes including firstChild, lastChild, previousSibling, nextSibling, and parentNode of the current node based upon the nature of the hierarchical structure. Additionally, adding a child node under a parent node, would inherently update the of values such as previousSibling and nextSibling for at least some nodes, while in cases where the added node is the firstChild or lastChild would additionally update the firstChild or lastChild attributes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined the well known ability of adding nodes, and inherently updating various attributes with Claussen, since it would have allowed a user to maintain relations between nodes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYLE R. STORK whose telephone number is (571)272-4130. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kyle Stork/
Kyle R Stork
Primary Examiner
Art Unit 2178

krs